

ABSTRACT

There is thus provided, in accordance with a preferred embodiment of the invention, a system for conversion of wave energy in a body of water having a floor, including:

- 5 (a) a stationary support element rigidly mounted to the floor of the body of water;
- 10 (b) buoyancy apparatus including a buoy portion having formed therewith wave energy collection apparatus in the form of a cavity integrally formed therewith, the cavity having an opening facing the direction of advancement of oncoming waves;
- 15 (c) coupling apparatus for hingedly connecting the buoyancy apparatus to the stationary support element so as to be pivotal in a generally vertical plane with respect to the stationary support element;
- (d) at least one piston apparatus for compressing and drawing hydraulic fluid when the piston apparatus is contracted or extended, correspondingly, the piston apparatus being hinged at one end to a stationary support, and hinged at its other end in association with a predetermined element operative to move in response to movement of the buoyancy apparatus;
- 20 (e) a hydraulic motor having an energy output; and
- (f) a piping system coupling the hydraulic fluid in the piston apparatus to the hydraulic motor;